ODP-81-1454 4 November 1981

	MEMORANDUM FOR:	Systems Requirements Manager, OC		
5X1	FROM:	Chief, Management Staff, ODP		
	SUBJECT:	Updated Communications Support Lequirement for FY 1983 - FY 1987	ents	
	REFERENCE:	Memo for D/ODP, et. al, fm. ADDA, same s dtd 26 June 1981, (DD/A 81-1300/2)	ubject	
	*			
-	l. As req 1983 requiremen	dested, ODP is forwarding an updated versions with out-year projections where applications	lon of able.	
	requirements, w	er to better identify and track these e are adding a unique ODP indentifier with ked requirement.	n each	
		appropriate, we have updated the requirement summary of requirements has also been up		
				25X1
		ry of Requirements rements Papers	i j	
	Distribution DD/A/CDP			
5X1		DD/P/ODP		25X1
	is document becomes UNCLAS nen separated from attachment			

ATTACHMENT A

Status of Previous Communications Requirements

FY 1983 - FY 1987

ODP 83-1 CAMS2 Development Facility Communications Support (FY 1982)* Communications support for a | person staff in the 25X1 Status: ODP has funded \$198,000 in FY 1982. ODP 83-2 CAMS2 Communications Upgrade (FY 1984). Fourfold increase in traffic volume for CAMS and bulk data transfer via Project Mercury. ODP has funded \$85,000 in FY 1984. Status: ODP 83-3 Wideband BUS Communications (WBCS) Support (FY 1983). Operation and maintenance of Headquarters WBCS Status: OC will fund. ODP 83-4 4C System (Phase II) Worldwide Communications Support (FY 1983) Extension of communications support worldwide Status: Covered in 4C (OS) budget. ODP 83-5 Installation of COMTEN Equipment in Outbuildings (FY 1984).

locations.

* FY required

25X1

Required to improve communications to remote metro

SEUNE

Approved For Release 2003/11/06 : CIA-RDP84-00933B000100160001-5

Status: Statistical multiplexers to replace COMTENS. Funding is the same in either case. \$83,000 in the ODP FY 1983 budget at the enhanced level was not approved.

ODP 83-6 General Communications Support for Terminal Installations.

Installation and relocation of terminals in Headquarters and outbuildings. TRW will install initial terminals for SAFE.

Status: OC will continue funding at previous levels.

ODP 83-7 Development of Interface between WBCS and COMTEN Processors (FY 1984).

Requirement moved to FY 1984 from FY 1983.

Status: ODP will place funds in FY 1984 Engineering budget.

ODP 83-8 Automatic Resynchronization of Cryptographic Devices in Outbuilding Circuits (FY 1983).

To replace manual resynchronization -- a time consuming process resulting in prolonged outages.

Status: OC will provide.

ODP 83-9 Enhanced Circuit Speed Capability (FY 1983).

To provide support for graphics devices, plotters and minicomputers.

Status: Installation of Statmux will resolve problem.

ODP 83-10 Additional Data Lines and Patch Panels in Ruffing and Special Centers (FY 1986).

To accommodate additional terminal installations and handle asynchronous and synchronous data.

Status: OC will fund.

ATTACHMENT B

				DDA RA	NK:	of
				OFFICE	RANK:	of
OFFICE:	ODP/Ar	oplications/A Di	vision			
TITLE:	CAMS2	Development Fac	cility Comm	municat	ions Su	pport
REQUIRE	MENT:					
ment of house the This fact mission will be 1982.	CAMS2, he Devel cility v facilit the Funds fo	expansion of the an additional solution of the second seco	secure fact lity Assura cure voice imately and should	ility wance co and se]person be ava	ntract cure da nel. T	acquired to personnel. ta trans- his facilit by January
JUSTIFI	CATION:				,	
in resp	onse to	is necessary to national colle- planned for the t have the spac	ction syst 1984/85 t	em enna imefran	$\mathbf{ne.}$ The	of CAMS2 s and Agency
TIME RE	QUIREME	NT:				
Communi later t	cations han Jan	support to thi uary 1982 and c	s facility ontinue th	must h	oe in pl FY 1988.	lace not
IMPACT	OF LACK	OF SERVICE ON	OTHER PROG	RAMS:		
enhance be acco	c CAMS fomplishe	e is not provid for the new/modi d within the re the remainder l responsive sou	fied colle quired time of the Int	ection : neframe cellige:	systems , thus once Com	depriving
CONTACT						
3173 N	Æ:					
NAN					•	
	FICE:	C/A Division/	ODP/			

25X1

25X1

25X1

25X1

25X1

COST ESTIMATES

09/16/81

25X1

FOR

DDA FY 1983 COMMUNICATIONS REQUIREMENTS

DIRECTORATE REQUIREMENT: 13

OFFICE: ODP

SECURE VOICE AND DATA CAPABILITY FOR [

BY JANUARY 1982.

(FUNDS ARE IN FY82 CAMS BUDGET)

25X1

COMMENT: LEASED LINE COSTS ARE RECURRING

DESCRIPTION	QTY	UNIT COST	TOTAL COST	SOC
LEASED T-1 LINE	1	24,000	24,000	2341
PHONES RACKS ETC	1	25,000	25,000	2604
MULTIPLEXER (M24) CY-104A TYPE DEVICE	2 2	10,000 32,000	20,000	3104
ELECTRONIC KEY SYS	4	7,500	64,000 30,000	3104 3104
MULTIPLEXER (T-96)	2	17,500	35,000	3104

COST ESTIMATES

09/16/81

FOR

DDA FY 1984 COMMUNICATIONS REQUIREMENTS

DIRECTORATE REQUIREMENT: 15

OFFICE: ODP

BULK DATA TRANSFER CAPABILITY FOR CAMS2 AS SOON AS AVAILABLE.

25X1

EQUIPMENT BELOW WILL PROVIDE MULTI-COMMENT:

CIRCUITS FOR VIRTUALLY ANY DATA RATES

REQUIRED IN ADDITION TO CURRENT CIRCUITS

DESCRIPTION	QTY	UNIT COST	TOTAL COST	SOC
INST MATERIALS	1	1,000	1,000	2604
KG-81 SYSTEM SMC-210 MUX	2 2	17,400 25,000	34,800 50,000	3104 3104

Approved For Release 2003/11/06: CIA-RDP84-009327000100160091-583--2

DDA RANK:	of
OFFICE RANK:	of

OFFICE: ODP/Applications/A Division

TITLE: CAMS2 Communications Upgrade

REQUIREMENT:

The COMIREX Automated Management System (CAMS) is being upgraded for the 1984/85 timeframe. This upgrade, CAMS2, is necessary to support the significant improvement in technical collection capabilities planned during that timeframe. We anticipate a 4-fold increase in the volume of CAMS message traffic (currently via DATEX). We anticipate the need to use the bulk data transfer capability of Project Mercury as soon as it is available.

JUSTIFICATION:

Increase is due to enhanced national collection systems increases. This requirement was levied upon ODP by PTO/CTS.

TIME REQUIREMENT:

Required no later than 1 April 1984 and through FY 1987.

IMPACT OF LACK OF SERVICE ON OTHER PROGRAMS:

CAMS must have a responsive communications network in order to fulfill its mission. We expect to be a heavy user of Mercury and must be able to rely on whatever interim support is being planned. If the support is not provided, CAMS loses its ability to provide current accomplishment data and quickly task the collection systems.

CONTACT:

25X1	NAME:	
	OFFICE:	.C/A Division/ODP
25X1	TELEPHONE:	

Approved For Release 2003/11/06: CIA-RDP84-00932R000100160001-5 CONFIDENTIAL

COST ESTIMATES FOR

02/24/81

DDA FY 1984 COMMUNICATIONS REQUIREMENTS

ECIDRATE REQUIREMENT: 05

OFFICE: ODP

ULK DATA TRANSFER CAPABILITY FOR CAMS2 AS OON AS AVAILABLE.

25X1

COMMENT: EQUIPMENT BELOW WILL PROVIDE MULTI-CIRCUITS FOR VIRTUALLY ANY DATA RATES REQUIRED IN ADDITION TO CURRENT CIRCUITS

DESCRIPTION	YTC	UNIT	TOTAL COST	50C
	0		9	
INST MATERIALS	1	1005	1000	2604
KG-81 SYSTEM SMC-210 MUX	2 2	17400 25000	34850 50000	3154 3194

Approved For Release 2003/11/06: CIA-RDP84-00983R000100160001-5

DDA RANK: Of Of OFFICE RANK: 3 Of 10

OFFICE: ODP/Special Projects Staff and Engineering Division

TITLE: Wideband Bus Communications System (WBCS) Support

REQUIREMENT:

25X1

25X1

The Office of Communications is to assume operation and maintenance responsibility for the WBCS during the second quarter of FY 1983. In July 1982, the SAFE and WBCS development contractor, will issue a proposal for providing operations and maintenance support of SAFE and the WBCS through FY 1983.

Therefore, while OC will be responsible for operation and maintenance of the WBCS, may be available to augment that

JUSTIFICATION:

support.

The WBCS will be installed and tested during FY 1980 through FY 1982. The WBCS will be placed into operation with the first increment of the SAFE system during the second quarter of FY 1983. Operation and maintenance training will be provided by the SAFE development contractor during the first quarter of FY 1983. The operation and maintenance responsibility by OC is consistent with the WBCS development agreement between ODP and OC.

TIME REQUIREMENT:

25X1

Approved For Release 2003/11/06: CIA-RDP84-00936R000100160001-5

Beginning in the second quarter FY 1983, through FY 1987.

IMPACT OF LACK OF SERVICE ON OTHER PROGRAMS:

The WBCS is being designed to support the entire Headquarters

Building. Lack of this support would seriously degrade SAFE, and

other ODP services that will utilize the WBCS.

CONTACTS:

25X1	NAME:	
•	OFFICE:	SPS/ODP; Teleprocessing Branch/ED/P/ODP
	TELEPHONE:	

Approved For Belease 2003/11/06: CIA-RDP84-00933P000100160001-5 CONFIDENTIAL

COST ESTIMATES FOR

72/24/81

DDA FY 1983 COMMUNICATIONS REQUIREMENTS

DIRECTORATE REQUIREMENT: 14

OFFICE: ODE

OPERATION AND MAINTENANCE FOR WBCS. MAY AUGKENT SUPPORT).

25X1

NOTE: OC WILL PROGRAM FOR SUPPORT.

DESCRIPTION OTY COST COST SOC

DDA RANK: Of Of 10

OFFICE: ODP/Applications/B Division

TITLE: 4C System (Phase II) World-wide Communications Support

REQUIREMENT:

Maintain Phase I network and extend system communications world-wide in cooperation with DIA communications. Funds for terminal and communications acquisition, installation and first-year maintenance will be budgeted by the Office of Security.

JUSTIFICATION:

Mission required under APEX implementation.

TIME REQUIREMENT:

FY 1983 - 1985: About 12 terminal locations per year.

Operations and maintenance required through FY 1987.

IMPACT OF LACK OF SERVICE ON OTHER PROGRAMS:

APEX could not be extended world-wide.

CONTACT:

25X1

NAME:

OFFICE:

ODP/B Division

Approved For Release 2003/11/06: CIA-RDP84-00932R000100160001-5 CONFIDENTIAL

COST ESTIMATES . FOR

02/24/81

DDA FY 1985 COMMUNICATIONS REQUIREMENTS

DIRECTORATE REQUIREMENT: 03 OFFICE: ODP

25X1

4C SUPPORT 12 TERMINALS.

PER CONTACT WITH ODP OFFICER REQUIREMENT COMMENT: COVERED IN 4C BUDGET.

> UNIT LATCT YTÇ COST COST SOC DESCRIPTION O 0

Approved For Belease 2003/11/06: CIA-RDP84-00933D000100160001-5

DDA RANK: of OFFICE RANK: of
OFFICE: ODP/Processing/Engineering Division
TITLE: Installation of Statistical Multiplexers in Outbuildings
REQUIREMENT:
Statistical multiplexers must be installed in all outbuildings to provide error correction and automatic alternate routing of data processing information in the event of line failure. (Note that this requirement replaces the requirement submitted for FY83 to install Comten equipment to provide this service.)
JUSTIFICATION:
Installation of statistical multiplexers is necessary to meet ODP user requirements for a low error rate and more reliable service.
TIME REQUIREMENT: FY84
IMPACT:
Failure to install statistical multiplexers in the outbuildings will reduce the utility of data processing services because of high error rates and unreliable service due to line outages.
CONTACT:
NAME:

Teleprocessing Branch/ED/P/ODP

25X1

25X1

OFFICE: TELEPHONE:

Approved For Release 2003/11/06 : CIA-RDP84-009366000100160001-5

DDA RANK:	of	
OFFICE RANK:	of	

OFFICE: ODP/Processing/Engineering Division

TITLE: Installation and Relocation of Equipment

REQUIREMENT:

This requirement includes installing new devices, relocation of devices, providing new data circuits, and upgrading existing circuits to higher speeds. Of the figures indicated in the table below, about 60% of the devices will be installed in Headquarters, and 40% in outbuildings.

Quantities of New Terminal Installations and Relocations By Fiscal Year

	FY84		FY85	FY86	FY87	FY88
TERMINALS IN ODP BUDGET	90		90	90	90	90
TERMINALS IN USER BUDGET	20		20	20	20	20
COMMUNICATING WORD PROCESSORS	_60		55	_50	_45	40
TOTAL	170	•	165	160	155	150
NUMBER OF RELOCATIONS						

JUSTIFICATION:

Installation and relocation support is necessary for users to have access to ODP facilities.

TIME REQUIREMENT: FY84 - FY 88

IMPACT:

Failure to provide timely installation and relocation services will prevent ODP from satisfying user requests for data processing services.

CONTACT:

25X1	NAME:		l	D (D (ODD
	OFFICE:	Teleprocessing	Branch/E	אַעט/אַ/ע
25X1	TELEPHONE:			

25X1

Approved For Release 2003/11/06: CIA-RDP84-00993R000100160001-5
ODP COMMUNICATIONS SUPPORT REQUIREMENTS FOR FY 83-87

DDA RANK: OF $\frac{}{7}$ Of $\frac{}{10}$

OFFICE: ODP/Processing/Engineering Division

TITLE: Development of Interface between the WBCS and COMTEN

Processors

REQUIREMENT:

Develop and provide interfaces between the WBCS (bus) and the COMTEN front-end processors presently in use. A sufficient number of these interfaces will be required to allow approximately 1650 data processing devices to be interfaced from the bus to the COMTENS. Maintenance of the interfaces is also required.

JUSTIFICATION:

This interface will be required to allow terminals and other devices to be moved from the copper grid to the bus.

TIME REQUIREMENT:

FY 83-87.

IMPACT OF LACK OF SERVICE ON OTHER PROGRAMS:

Failure to provide these interfaces will prevent additional terminals from being installed because the copper grid is presently filled to near its capacity.

Approved For Release 2003/11/06: CIA-RDP84-00933R000100160001-5

Approved For Release 2003/11/06 : CIA-RDP84-00923R000100160001-5 CONFIDENTIAL

COST ESTIMATES FOR

02/24/81

FY 1983 COMMUNICATIONS REQUIREMENTS DDA

DIRECTORATE REQUIREMENT: 18 OFFICE:

ODP

DEVELOPE AND PROVIDE INTERFACE BETWEEN WBCS AND COMIEN FRONT END (1650 DEVICES TO BE INTERFACED). MAINTENANCE REQUIRED.

SOLUTION DEPENDENT ON FEASIBILITY STUDY FOR BUS-COMTER NOTE: INTERCONNECT IN WHICH ODP IS A PARTICIPANT.

	~	r	۸	
DESCRIPTION	YTÇ	COST	COST	30C
		V — U	TOTAL	

Approved For Release 2003/11/06: CIA-RDP84-00996R000100160001-5

	DDA RANK: of OFFICE RANK: of
OFFICE: ODP/Processing/Engineering Division	L
TITLE: Automatic Resynchronization of Crypt Outbuilding Circuits	ographic Devices in
REQUIREMENT:	
All trunk circuits carrying data processing the capability for the cryptographic equip following an outage or other circuit al cryptographic synchronization.	nment to automatically resymmetric
JUSTIFICATION:	
Some users located in outbuildings exp cryptographic equipment loses synchr synchronization until OC is notified vioutages must be reduced from minutes to a	a telephone. The length of these
TIME REQUIREMENT: FY84 (if not completed	earlier)
IMPACT:	
Failure to provide this capability will r services to users located in the outbuildi	educe the utility of data processing ings.
CONTACT:	
NAME:	

25X1

Teleprocessing Branch/ED/P/ODP

25X1

TELEPHONE:

Approved For Release 2003/11/06 : CIA-RDP84-00936R000100160001-5 CONFIDENTIAL

COST ESTIMATES

02/24/81

FY 1983 COMMUNICATIONS REQUIREMENTS DDA

DIRECTORATE REQUIREMENT: 19 OFFICE: ODP

PROVIDE AUTOMATIC RESYNCH OF CRYPTO DEVICES IN OUTBUILDING CIRCUITS.

NOTE: OC WILL PROVIDE.

TOTAL UNIT COST SOC YTC COST DESCRIPTION 2

Approved For Release 2003/11/06 : CIA-RDP84-00939R000100160001-5

DDA RANK:	of
OFFICE RANK:	of

OFFICE: ODP/Processing/Engineering Division

TITLE: Enhanced Circuit-Speed Capabilities

REQUIREMENT:

ODP requires circuits which operate at the following speeds, in order to support projected ADP requirements.

ASYNCHRONOUS - 300, 600, 1200, 2400, 4800, 9600, and 19,200 bits per second

SYNCHRONOUS - 2.4, 4.8, 9.6, 19.2, 56.0 and 64.0 kilobits per second

JUSTIFICATION:

In order to satisfy requirements for new types of equipment and services, the above data rates must be provided by OC. Examples of these requirements are: plotters, color graphics terminals, word processing stations, high volume/high quality printers located in outbuildings, and interfaces with minicomputer installations.

TIME REQUIREMENT: FY84 - FY 88

IMPACT:

Failure to provide these data rates would prevent ODP from satisfying customer requirements.

CONTACT:

25X1	NAME:			•
	OFFICE:	Teleprocessing	Branch/E	D/P/ODE
25X1	TELEPHONE:			

Approved For Release 2003/11/06: CIA-RDP84-00930R000100160001-5 CONFIDENTIAL

COST ESTIMATES FOR

02/24/81

DDA FY 1983 COMMUNICATIONS REQUIREMENTS

RECTORATE REQUIREMENT: 20

OFFICE: ODP

PROVIDE FOLLOWING DATA RATES FOR ASYNCH - 300 - 600-1200-2400-4800-9600 AND 19200 BPS. FOR SYNCH - 2.4-4.8-9.6-56.0 AND 64.0 KBPS.

25X1

TE: WITH DEVELOPMENT OF STAT MUX METROPOLITAN NETWORK WILL ACCOMMODATE THE DATA RATES STATED. STAT MUX PRODUCTION DELIVERY EXPECTED TO BEGIN IN EARLY FY82.

	_	3		
DESCRIPTION	-	COST		SOC
DE TOTAL			TOTAL	

Approved For Release 2003/11/06 : CIA-RDP84-00930R000100160001-5

DDA RANK:	of	
OFFICE RANK:	of	

OFFICE: ODP/Processing/Engineering Division

TITLE: Installation of Additional Data Lines and Patch Panels in the

Ruffing and Special Computer Centers

REQUIREMENT:

Additional data lines and patch panels must be installed in the Ruffing and Special Computer Centers to accommodate new terminal installations. These lines must be capable of handling asynchronous data with hardware flow control, or synchronous data. The total number of lines for each computer center are listed below by year.

Additional data lines required for the Ruffing Center

	FY84	FY85	FY86	FY87	FY88
Installed based	2450	2620	2785	2945	3100
New devices	170	165	160	155	_150
TOTAL LINES	2620	2785	2945	3100	3250

Additional data lines required for the Special Center

	FY84	FY85	FY86	FY87	FY88
Installed based	300	350	400	450	500
New devices	. 50	• 50	50	50	_50
TOTAL LINES	350	400	450	500	550

JUSTIFICATION:

These additional data lines and patch panels are required to support the planned installation of new data processing devices required by users.

TIME REQUIREMENT: FY84 - FY 88

IMPACT:

Failure to provide timely installation and relocation services will prevent ODP from satisfying user requests for data processing services.

CONTACT:

25X1	NAME:			
20/(1	OFFICE:	Teleprocessing	Branch/E	D/P/ODP
25X1	TELEPHONE:			

Approved For Release 2003/11/06: CIA-RDP84-009 30 000100160001-5

COST ESTIMATES
FOR

02/24/81

DDA FY 1986 COMMUNICATIONS REQUIREMENTS

DIRECTORATE REQUIREMENT: 04

OFFICE: ODP

INSTALL 336 ASYNCH AND 48 BISYNCH DATA LINES AND PATCH PANELS BETWEEN PIU AND CONTENS UNLESS BUS DESIGN ALLOWS FOR DIRECT COMMO WITH COMTEN PROCESSOR.

COMMENT: SOLUTION DEPENDENT ON FEASIBILITY STUDY FOR BUS-COMMENT INTERCONNECT IN WHICH ODP IS A PARTICIPANT.

DESCRIPTION	YTC	COST	COST	SOC
,	Α_	3	_	